



Economics Research Associates

**ECONOMIC IMPACT ANALYSIS OF
INDIANA'S FILM AND VIDEO PRODUCTION
INDUSTRY**

**PREPARED FOR
INDIANA FILM COMMISSION**

**PREPARED BY
ECONOMICS RESEARCH ASSOCIATES**

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Section II. Executive Summary

The Indiana Film Commission has commissioned Economics Research Associates (ERA) to conduct a study which assesses the economic impact of motion picture production in the State of Indiana. The goal of this analysis is to: (1) develop a baseline or benchmark describing the size and extent of the industry throughout the State, for the purpose of measuring changes in the industry, and (2) demonstrate its contributions to the economy of Indiana.

ERA's experience in conducting economic impact assessments for the motion picture production industry would indicate that the industry represents an extremely difficult data environment since the combination of contingent employment and single-purpose corporations, combined with the high level of mobility and transient labor in the motion picture production industry, requires a more creative approach to traditional methods of sector analysis.

Data Sources

Since no single data set for the motion picture production industry is comprehensive in and of itself, ERA used multiple data sources to outline the parameters of the motion picture and television production industry in Indiana.

The primary four sources of data used in this report include:

- **ES202 Data.** The State of Indiana's Labor Market Division collects data, which includes all wage and salary employment that is covered under Unemployment Insurance. This data is organized by Standard Industrial Classification (SIC) code and includes the number of firms, total employment, and total wages. All wage and salary labor is covered by ES202, including temporary workers and contingent labor. However, business enterprises that are owned and operated by sole proprietors are excluded from this data.
- **Firm Level Data.** This data from Dun & Bradstreet (D&B), a private credit rating service, contains information on business enterprises that have applied for or undertaken a number of specified financial transactions thus generating an evaluation of a firm's credit worthiness. Unlike ES202 data, D&B data includes business enterprises that are owned and operated by sole proprietors.
- **The Internet Movie Database.** This database consists of movie information that includes details on over 6.3 million feature film and television productions. The primary source of this information is from on-screen credits. ERA used this information for the types and number of annual productions shot in Indiana.
- **The Indiana Film Commission.** ERA utilized information from an annual survey that the Indiana Film Commission has provided *The Hollywood Reporter* trade journal. This information is for calendar years 1999, 2000, and 2001. In addition, ERA mapped out the locations of various production-related businesses and crewmembers, as listed in the 2002 *Film and Television Sourcebook*.

Data Source Parameters

The precise definition of the size of the industry in Indiana is necessarily complicated by the diversity of the sources available. It is important to note that there are dissimilarities between these four data sets and other sources, as well as amongst the data sets themselves. Each of these data sets offers a slightly different view and definition of the industry in terms of the source's coverage and completeness.

While the State and D&B data provide information on internal production activity generated within the State, the latter two sources focus on external production activity in Indiana; that is, production activity that is generated by companies or persons residing outside of the State.

In some instances, external production companies (*e.g.*, Los Angeles-based) may employ Indiana residents, and in others they may import their own crew members. While imported labor may not generate wages for the State of Indiana, they nevertheless generate an impact on local spending in the form of restaurants, hotel room night generation, and other services.

The Motion Picture Production Industry in Indiana

Based upon ERA's analysis, the following statements can be made about the size of the industry locally.

Wage and Salary Employment

- The core motion picture production industries (SIC Codes 7812, 7819, 7822, and 7829) in the State of Indiana employed approximately 1,100 wage and salary employees for 2001 and provided over \$10 million in total wages to workers.
- Over a five-year period between 1997 and 2001, motion picture employment remained relatively steady, peaking in 1999. While employment on the motion picture production side of the business (SIC 781) remained unchanged over the period, average annual employment on the distribution side (SIC 782) experienced a significant decrease.

Firms

- In 2002, a total of 377 firms, which include sole proprietorships (which are excluded from ES202 data, *i.e.*, non-covered employment) were working in the State of Indiana, employing a total of 2,121 persons.
- Utilizing average annual wages per firm of \$74,683 per business, ERA estimates that the 377 total motion picture production-related businesses in the State of Indiana generated payroll wages of over \$28 million in 2002. Note that this is a minimum estimate. The total compensation to Indiana residents could be significantly higher, as non-covered employment is likely to have a greater total compensation package than the covered employment upon which this estimate is based. Non-covered employment includes owner proprietors who are paid from distribution of profits and related sources. An analysis of individual state income tax returns by occupation would serve

as an indicator of the value of total compensation for non-covered employment. This data is generally confidential and not made available to the general public and has not been included in this report.

- Total sales for all four sectors (SIC 7812, 7819, 7822, and 7829) in 2002 were over \$352 million.

Productions

- The State of Indiana does not require permits such that tracking total production can be difficult. Therefore, information reported from the Indiana Film Commission is not necessarily all-inclusive. Furthermore, it may not account for commercial production, in addition to production activities that are internally generated by Indiana-based production companies.
- Between 1995 and 2002, data from the Internet Movie Database (IMDB) indicates that a total of 75 feature film, television (*e.g.*, series, MOWs, pilots, etc.), and direct-to-video projects have shot in Indiana. On average, the State has been hosting a total of 9 such productions annually.
- Based on the data provided by the IFC for years 1999 through 2001, ERA estimates that a typical feature film project shoots partially in the State, spending an average of \$300,000 locally. Using the number of 42 total feature film productions shot in Indiana between 1995 and 2002, as identified by IMDB, ERA estimates that such projects generated local spending of over \$12 million.

Economic Impact

In order to assess the economic impact of motion picture production in the State of Indiana, ERA turned to the U.S. Department of Commerce, Bureau of Economic Analysis' (BEA) Regional Input/Output Modeling System (RIMS II). Through the use of the input/output model, the "multiplier effect" (*e.g.*, the value of all intermediate purchases of goods and services including their secondary and induced effects) can be determined. It is important to note that each multiplier is specific to the economy of the region which is being investigated. This approach was used to determine the total regional multipliers for output, earnings, and employment.

Indiana's Multiplier Effects

ERA's analysis shows that for every \$1 spent on motion picture production in the State of Indiana, an additional \$0.83484 of output are created elsewhere in the economy. Also, every dollar of earnings that workers are paid for motion picture production supports an additional \$0.5812 of wages elsewhere in the region. And, finally, every \$1 million spent on motion picture production in the State of Indiana supports 32.6 full-time equivalent jobs.

Total Impacts

Activities by Local Firms

- Sales by Indiana firms in the film industry were over \$352 million in 2002. These sales can be estimated to have generated an additional \$295 million in indirect and induced economic impact across all of the sectors in Indiana's economy. This yields a total estimated economic impact of over \$647 million.
- These economic activities can be estimated to have generated over \$204.5 million in earnings in Indiana firms and workers in 2002.
- The total direct and indirect employment generated by the motion picture production industry in the State can be estimated at just under 11,500 full-time equivalent employment positions across all of the sectors of Indiana's economy.

Impacts of Location Production

Location production figures are based on the estimates of spending generated by both the Indiana Film Commission and analysis of IMBD data. These figures cannot be combined with the sales of Indiana-based firms, as their contributions would be subsumed within these estimates. In order to avoid double counting these impacts of sales by firms and location filming data, both data sets should be presented and interpreted separately.

- Based on data supplied by the IFC the average feature film shooting in Indiana spent \$300,000. From this, ERA estimates that the average feature filming in the State generates a total of over \$551,000 in economic impacts.
- Using the IMDB figure of 42 feature films filmed in Indiana from 1995 to 2002, it can be estimated that these projects spent over \$12 million in the state. This total activity would have supported over \$22 million in total economic impacts, generated \$6.9 million in earnings and supported just over 390 full-time equivalent jobs over the eight-year time period.